

**LEASE MODIFICATION**  
**LEASE # 5456**

BOOK 0705 PAGE 0533

**THIS AGREEMENT**, Made and entered into this 5<sup>th</sup> day of **May, 2009**, by and between **Jean Ann McCulloh, a married woman dealing in her sole and separate property**, whose address is **4614 Spanish Oak Road, Temple, TX 76502** parties of the first part, hereinafter called "Lessors", and **CHESAPEAKE APPALACHIA, L.L.C.**, an Oklahoma limited liability company, the surviving entity of the merger with Columbia Natural Resources, LLC (formerly known as Columbia Natural Resources, Inc.) of 900 Pennsylvania Avenue, Charleston, West Virginia 25302, party of the second part, hereinafter called "Sublessee" as acknowledged and agreed by Columbia Gas Transmission, L.L.C., hereinafter called "Sublessor";

**WITNESSETH:**

**THAT WHEREAS**, by agreement dated March 3, 1915, Louisa A. Pyles and E. C. Pyles, single granted to The Wheeling Natural Gas Co., predecessor in title to Sublessor, as lessee thereunder, an oil and gas lease covering a tract of land containing 153.00 acres, more or less, situate in Liberty District, Marshall County, West Virginia, and recorded in the Clerk of the County Commission in Book 144 at Page 494; and

**WHEREAS**, said agreement dated March 3, 1915, was modified by agreement dated April 22, 1954 and August 22, 1994 by Evert C. Pyles and Pauline Higgins, et al and The Manufacturers Light and Heat Company and Columbia Gas Transmission Corporation, predecessor in title to Columbia Gas Transmission, L.L.C., to provide for the production and storage of natural gas, and recorded in the Clerk of the County Commission of Marshall County in Book 299 and 566 at Page 46 and 465, hereinafter the "Lease" as modified; and

**WHEREAS**, by sublease agreement dated September 2, 2004 and recorded in the Offices of the Clerks of the County Commissions of Marshall and Wetzel Counties, West Virginia in Deed Book 642, at page 281 and Book 84-A, at page 129 respectively, Columbia Gas Transmission Corporation (predecessor in title to Columbia Gas Transmission, L.L.C.) granted to Columbia Natural Resources, LLC (predecessor in title to Chesapeake Appalachia, L.L.C.), all rights necessary for the PRODUCTION OF OIL AND GAS in all formations EXCEPT the interval from 250 feet above the top of the Greenbrier Limestone (inclusive of all Maxon sands) to 50 feet below the base of the Pocono Big Injun formation being reserved or operated for storage, hereinafter the "Sublease" and which Sublease has been modified and amended by that certain agreement dated June 5, 2007, and effective as stated therein (the "Sublease Agreement");

**WHEREAS**, Lessors are now the owners of the oil and gas rights underlying the land covered by said Lease that is situate in Liberty District, Marshall County, West Virginia; and

**WHEREAS**, Lessors and Sublessee, for their mutual benefit, with the consent of Sublessor, desire to amend and modify said Lease agreement in order to facilitate the formation of drilling units.

**NOW THEREFORE**, in consideration of the premises and the sum of One Dollar (\$1.00) paid by the Sublessee to Lessors, the receipt of which is hereby acknowledged, and of

the covenants hereinafter contained, Lessors and Sublessee hereby supplement and modify said Lease as follows, to-wit:

**DELAY IN MARKETING:** In the event that Sublessee does not market producible gas, oil or their constituents from the Leasehold, or lands pooled/unitized therewith, Sublessee may continue to pay Delay Rental at the rate of Five Dollars (\$5.00) per acre annually until such time as marketing is established, or until the end of the Sublease term, as it relates to the acreage described herein, if marketing is not established by that time.

**UNITIZATION:** Lessors grant Sublessee the right to pool, unitize, or combine all or any part of the Leasehold with any other land, leased or unleased, whether owned by Sublessee or others, to create drilling or production units either by contract right or pursuant to governmental authorization. In the event of the unitization of the whole or any part of the Leasehold, Sublessee shall, either before or after the completion of a well, record a copy of its unit operation designation in the county in which the Leasehold is located. Sublessee is granted the right to change the size, shape, and conditions of operation of any unit created, without the consent of Lessors. As to such a unit, Lessors agree to accept and receive out of the production or the proceeds from the production of such unit, such proportional share of the royalty from each unit well as the number of acres in the Leasehold which may be included from time to time in the unit bears to the total number of acres in the unit. Otherwise, the drilling, operations for drilling or any operations in preparation for drilling, or any production from a well on such a unit shall have the same effect upon the terms of this Lease, as amended and modified hereby, as if the operations or well were on this Leasehold itself, except for the FREE GAS clause, of which the Lessor acknowledges is hereby expressly released and terminated by this Lease Modification.

**SHUT-IN:** In the event that production of oil, gas, or their constituents is interrupted and not marketed for a period of six months, and there is no producing well on the Leasehold, or lands pooled/unitized therewith, Sublessee may thereafter, as Royalty for constructive production, pay a Shut-in Royalty equal in amount and frequency to the Delay Rental until such time as production is re-established and said payment shall maintain the above-referenced lease and modification in full force and effect to the same extent as payment of Royalty. During Shut-in, Sublessee shall have the right to rework, stimulate, or deepen any well on the Leasehold or drill a new well on the Leasehold in an effort to re-establish production, whether from an original producing formation or from a different formation. In the event that the production from the only producing well on the Leasehold is interrupted for a period of less than six months, the above-referenced Lease and Modification shall remain in full force and effect without payment of Royalty or Shut-in Royalty.

**ROYALTY:** Sublessee agrees to pay Lessor one-eighth of the net amount realized by Sublessee, calculated at the wellhead for actual volumes of oil, gas and their constituents sold (excluding storage gas) from said land. As used in this lease, the term "net amount realized by Sublessee, calculated at the wellhead" shall mean the gross proceeds received by Sublessee from the sale of oil, gas and their constituents sold (excluding storage gas) from said land, minus all post-production costs incurred by Sublessee between the wellhead and the point of sale. As used in this Lease, the term "post-production costs" shall mean all costs and expenses actually and reasonably incurred by Sublessee between the wellhead and the point of

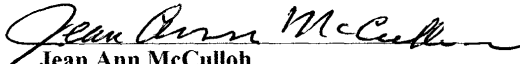
sale, accounted for in accordance with generally accepted industry principles, including but not limited to costs and expenses of (a) treating and processing oil, gas and/or their constituents and (b) separating liquid hydrocarbons from gas, other than condensate separated at the well and fractionation of the natural gas liquids, and (c) transporting oil, gas and/or their constituents, including but not limited to transportation between the wellhead and any production or treating facilities, and transportation to the point of sale, including any line loss, retainage or volume adjustments of any kind, and (d) compressing gas for transportation and delivery purposes, and (e) metering oil, gas and/or their constituents to determine the amount sold and/or the amount used by Sublessee, and (f) sales charges, commissions and fees paid to third parties (whether or not affiliated) in connection with the sale of the oil, gas and/or their constituents and (g) any and all other costs and expenses of any kind or nature incurred now or in the future whether or not such is specifically set forth herein with regard to the oil, gas and/or their constituents, or the handling thereof, between the wellhead and the point of sale. Sublessee may use its own pipelines and equipment to provide such treating, processing, separating, fractionation, transportation, compression and metering services, or it may engage others to provide such services; and if Sublessee uses its own pipelines and/or equipment, post-production costs shall include without limitation reasonable depreciation and amortization expenses relating to such facilities, together with Sublessee's cost of capital and a reasonable return on its investment in such facilities, accounted for in accordance with generally accepted industry principles. Prior to payment of royalty, Lessor may be required to execute a division order certifying Lessor's ownership interest in production. Sublessee may pay all taxes and fees levied upon the oil, gas and/or their constituents produced or the value or proceeds from the sale of such oil, gas and their constituents (excluding storage gas) from said lands, including, without limitation, excise, depletion, severance taxes, privilege and production taxes and surveillance fees that are now or hereafter levied or assessed or charged on oil, gas and their constituents hereby produced or the value or proceeds from the sale of such oil, gas and their constituents (excluding storage gas) from said lands, and deduct a proportionate share of the amount so paid from any monies payable to Lessor hereunder. It is agreed that any royalty conveyances in Lessor's chain of title shall be deducted from any monies payable to Lessor hereunder and that any royalty payments are subject to reduction pursuant to the Unitization provisions herein. Sublessee may withhold royalty payments until such time as the total withheld exceeds fifty dollars (\$50.00).

SUBLESSEE shall have the right to perform geophysical studies through the use of seismic research and other means and methods not restricted to current technology.

LESSOR ratifies the aforesaid Lease dated March 3, 1915 and modification agreement dated April 22, 1954 and August 22, 1994, as hereby amended and modified, and acknowledges that it is a valid and subsisting Lease and shall remain in full force and effect according to the terms and tenor thereof unless otherwise specifically amended hereby.


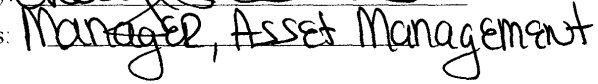
This agreement extends to and is binding upon the parties hereto, their respective heirs, successors, administrators, executors and assigns.

WITNESS the following signatures and seals all as of the day and year above first written.

  
Jean Ann McCulloh

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COLUMBIA GAS TRANSMISSION, L.L.C.

By:   
Its:  Manager, Asset Management

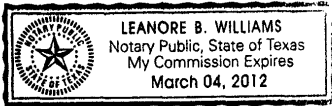
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Book-Page 705-633  
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Additional \$6.00

## ACKNOWLEDGMENT

STATE OF TexasCOUNTY OF Bell, to-wit:

On this the 8th of May, 2009, before me, Leanore B. Williams a Notary Public, came **Jean Ann McCulloh, a married woman dealing in her sole and separate property** to me known (or to be satisfactorily proven) to be the individual(s) described in, and who executed the foregoing instrument, and acknowledged that they executed the same for the purpose therein contained.

In witness thereof, I hereto set my hand and official seal.



Leanore B. Williams  
My commission expires on: 03/04/2012

## ACKNOWLEDGMENT

STATE OF WEST VIRGINIA

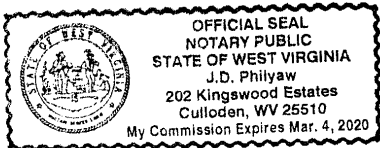
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} ss.

COUNTY OF KANAWHA

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On the 23rd day of April, in the year 2010, before me, the undersigned, a Notary Public in and for said State, personally appeared Cheryl Davis Mgr Asset Mgt personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.



J.D. Philyaw  
Notary Public

This instrument was prepared by  
Chesapeake Appalachia, L.L.C.  
900 Pennsylvania Avenue  
Charleston, WV 25302

STATE OF WEST VIRGINIA, MARSHALL COUNTY, SCT.:

I, JAN PEST, Clerk of the County Commission of said County, do hereby certify that the annexed writing, bearing date on the 8th day of May, 2009 was presented for and by me, admitted to record in my office upon the above certificate as to the parties therein named this 5th day of August, 2010 at 2:23 o'clock P.M.

TESTE: Jan Pest Clerk.